CLAIMS

What is claimed is:

1.   A method for synchronization and propagation of metadirectory updates, said

metadirectory comprising a plurality of joined heterogeneous data sources,

5   said   data sources comprising one or more entries having one or more attributes,

said method comprising the steps of:

        receiving a first update operation for a first entry in a first data source;

        selecting a best match entry of said metadirectory to said first entry in

the first data source; and

10   propagating a differential update command to at least one other joined

data source to implement said first update operation.

2.   The method as set forth in Claim 1 wherein said step of receiving a first

update operation comprises receiving an LDAP change operation.

3.   The method as set forth in Claim 1 wherein said step of selecting a best match

15   entry of said metadirectory comprises the step of consulting a synonym list to

resolve multiple matches.

4.   The method as set forth in Claim 1 wherein said step of selecting a best match

entry of said metadirectory comprises the step of performing a weighted

scoring analysis across two or more attributes.

20 5.   The method as set forth in Claim 1 wherein said step of propagating a

differential update command comprises the step of transmitting an LDAP

change operation.

6.   The method as set forth in Claim 1 wherein said step of propagating a

differential update command comprises the steps of:

creating a copy of said metadirectory best match entry;

applying said first update operation to said copy of the best match

5   entry to yield a modified best match entry;

comparing said best match entry to said modified best match entry to

determine if said first update operation results in a net change to said best

match entry; and

blocking propagation of said first update operation if no net change

10   is determined to be caused by the first update operation.

7.   A computer readable medium encoded with software for synchronization and

propagation of metadirectory updates, said metadirectory comprising a

plurality of joined heterogeneous data sources, said data sources

comprising one or more entries having one or more attributes, said software

15   causing one or more processors to perform the steps of:

receiving a first update operation for a first entry in a first data source;

selecting a best match entry of said metadirectory to said first entry in

the first data source; and

propagating a differential update command to at least one other joined

20   data source to implement said first update operation.

8.   The computer readable medium as set forth in Claim 7 wherein said software

for receiving a first update operation comprises software for receiving an

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LDAP change operation.

9.   The computer readable medium as set forth in Claim 7 wherein said software for selecting a best match entry of said metadirectory comprises software for consulting a synonym list to resolve multiple matches.

5   10.   The computer readable medium as set forth in Claim 7 wherein said software for selecting a best match entry of said metadirectory comprises software for the step of performing a weighted scoring analysis across two or more attributes.

11.   The computer readable medium as set forth in Claim 7 wherein said software for propagating a differential update command comprises software for transmitting an LDAP change operation.

12.   The computer readable medium as set forth in Claim 7 wherein said software for propagating a differential update command comprises software for causing a processor to perform the steps of:

         creating a copy of said metadirectory best match entry;

         applying said first update operation to said copy of the best match entry to yield a modified best match entry;

         comparing said best match entry to said modified best match entry to determine if said first update operation results in a net change to said best match entry; and

         blocking propagation of said first update operation if no net change is determined to be caused by the first update operation.

13.   A system for synchronization and propagation of metadirectory updates, said

metadirectory comprising a plurality of joined heterogeneous data sources,

said   data sources comprising one or more entries having one or more attributes,

said system comprising:

5   an update operation receiver adapted to receive a first update

operation for a first entry in a first data source;

a matcher adapted to select a best match entry of said metadirectory to

said first entry in the first data source; and

an update propagator adapted to propagate a differential update

10   command to at least one other joined data source to implement said first

update operation.

14.   The system as set forth in Claim 13 wherein said update operation receiver is

adapted to receive an LDAP change operation.

15.   The system as set forth in Claim 13 wherein said matcher is adapted to

15   consult a synonym list to resolve multiple matches.

16.   The system as set forth in Claim 13 wherein said matcher is adapted to

perform a weighted scoring analysis across two or more attributes.

17.   The system as set forth in Claim 13 wherein said update propagator is

adapted to transmit an LDAP change operation.

20 18.   The system as set forth in Claim 13 wherein said update propagator is

adapted to perform the steps of:

creating a copy of said metadirectory best match entry;

applying said first update operation to said copy of the best match

entry to yield a modified best match entry;

comparing said best match entry to said modified best match entry to

determine if said first update operation results in a net change to said best

5   match entry; and

blocking propagation of said first update operation if no net change

is determined to be caused by the first update operation.